SELECTION OF STREAM HEADWATER

County: _____ Route: _____ Item No:_____

UPN: _____ MARS: _____ Station: _____

The HEADWATER point on a stream is located at the site where the normal flow is 5 cubic feet per second (cfs).

Use the following equations ---

$$Q_a = 1.39 * A * (LAT - 36)^{-0.15} * E^{0.12}$$

Where :

			* Data Range
Q_a	=	the mean annual discharge or the normal flow in cfs.	Q_a = (0.94 - 9,360)
A	=	the drainage area in square miles	A = (0.67 - 2,762)
LAT	=	latitude of site in degrees	LAT = (36.341 - 39.140)
E	=	the mean elevation of the basin in thousands of feet. This is	E = (0.391 - 2.414)

determined by laying a grid on the quad sheet and locating the

elevation of five to ten uniformly spaced points. The average of

these elevations divided by 1000 is E.

1. Determine A for site from USGS quadrangle sheets.

2. Determine Latitude from quadrangle sheets.

3. Determine E for the watershed.

4. Solve the above equations for Qa.

A   = _____ mi^2

LAT = _____ degrees

E   = _____ 1000 ft.

Qa   = _____ cfs

5. If > 5 cfs, below headwater, or if < 5 cfs, above headwater.